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REMARKS

Reconsideration of this application, as amended, is respectfully requested.

Claims 1, 2, 5-10 and 15 are pending in the application, with Claims 1 and 8 being the independent claims.

The Examiner rejected Claims 1, 2, 5-10 and 15 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,461,164 to *Edwards et al.* (hereinafter, *Edwards*) in view of *Baiocchi et al.*, IP QoS Delivery in a Broadband Wireless Local Loop: MAC Protocol Definition and Performance Evaluation, IEEE Journal on Selected Areas in Communication, Vol. 18, No. 9, September 2000, (hereinafter, *Baiocchi*).

Regarding the §103(a) rejection, the Examiner contends that each element of the claims is taught, suggested or rendered obvious by the combination of *Edwards* and *Baiocchi*.

Specifically, the Examiner contends that *Edwards* teaches or suggests each element of Claim 1 with the exception of an admission controller and a PDU maker for generating PDUs from the data packets given the first priorities. The Examiner cites *Baiocchi* in an attempt to remedy these deficiencies.

Claim 1 has been amended to more clearly recite the subject matter of the present invention. Specifically, amended Claim 1 recites that a first module comprises a classifier for identifying a type of packet traffic and classifying data packets corresponding to the packet traffic according to the QoS policy stored in the QoS profile. The first module also comprises an admission controller for determining admission or discarding of the classified data packets provided from a plurality of QoS queues based on a current call state and characteristics of the classified data packets. A second module comprises a second priority controller for determining second priorities of the PDUs according to packet information of the PDUs. The packet information is based on a header or an identifier of a corresponding data packet. The second module also comprises a sorting queue for storing the PDUs based on the second priorities of the

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PDUs assigned by the second priority controller. The second module further comprises a transmitter for arranging the PDUs given the second priorities in an allocated bandwidth to transmit the PDUs. The first module is constructed in a MAC layer by software and the second module is constructed in the MAC layer by hardware. The first module further comprises the plurality of QoS queues for dividing and storing the data packets classified by the classifier, and a plurality of priority queues for dividing and storing the data packets admitted by the admission controller based on their priorities. The classifier identifies the type of packet traffic and stores a data packet of the packet traffic in one of the plurality of QoS queues based on a QoS policy corresponding to the identified type. The admission controller stores the data packet, which is determined for admission, in one of the plurality of priority queues and discards data packets that have a degree of importance lower than a predetermined degree based on a network state. The type of packet traffic comprise s at least one of audio data and burst data.

Edwards discloses a MAC architecture for WLAN stations. Specifically, Edwards describes that a first software module prioritizes data packets and writes the data packets to queues of a second hardware module based on these priorities. A transmit logic of the second hardware module controls removal of the packets from the queues in accordance with assigned priorities of the queues. Processing in the second hardware module may also be based on QoS designations of the packets.

Thus, *Edwards* clearly describes a first priority assigned to data packets in the software module, and a second priority assigned to queues in the second hardware module. *Edwards* only describes the assignment of priorities to queues in the second hardware module, and fails to disclose the determination of priorities of PDUs in the second hardware module, as recited in amended Claim 1. *Edwards* also fails to disclose that this second hardware module determines priorities of PDUs based on a header or an identifier of the corresponding data packet, as recited in amended Claim 1. Additionally, *Edwards* fails to disclose that the second module comprises a sorting queue that stores the PDUs based on the second priorities of the PDUs assigned by the second priority controller, as recited in amended Claim 1.

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Edwards describes processing of packets according to QoS designation in the second hardware module, but fails to relate the QoS designation to a priority assigned in either the first software module or the second hardware module. There is also no description in Edwards indicating from where the QoS designation is determined. Thus, this QoS designation cannot be utilized to support a rejection of the portion of Claim 1 reciting a determination of second priorities of PDUs according to a header or an identifier of a corresponding data packet. Additionally, this QoS designation processed in the second hardware module of Edwards cannot be utilized to support a rejection of the portion of Claim 1 reciting that a first software module gives first priorities to the packets according to a QoS policy, as recited in amended Claim 1.

While *Edwards* describes that a wireless communication network may be used to communicate data and voice between devices according to a variety of different formats, *Edwards* fails to disclose that the first software module identifies the type of traffic (audio data or burst data) and classifies packets corresponding to the type of traffic according to a QoS policy, as recited in amended Claim 1.

Baiocchi discloses generating PDUs, but fails to remedy the deficiencies of Edwards described above. Therefore, Claim 1 is patentable over the combination of Edwards and Baiocchi.

The Examiner also rejected independent Claim 8 under 35 U.S.C. §103(a). Claim 8 has been amended in a manner similar to that of Claim 1, and recites similar subject matter. In view of the above, amended Claim 8 is also patentable over the combination of *Edwards* and *Baiocchi*.

Regarding Claims 2, 5-7, 9, 10 and 15, while not conceding the patentability of the dependent claims, *per se*, Claims 2, 5-7, 9, 10 and 15 are also patentable for at least the above reasons. Accordingly, Applicants assert that Claims 1, 2, 5-10 and 15 are allowable over the combination of *Edwards* and *Baiocchi*, and the rejection under 35 U.S.C. §103(a) should be withdrawn

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Accordingly, all of the claims pending in the Application, namely, Claims 1, 2, 5-10 and 15 are believed to be in condition for allowance. Should the Examiner believe that a telephone conference or personal interview would facilitate resolution of any remaining matters, the Examiner may contact Applicants' attorney at the number given below.

Respectfully submitted,

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